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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,008

08/21/2006

Satoshi Kadokawa

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6887

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SUGHRUE-265550
2100 PENNSYLVANIA AVE. NW
WASHINGTON, DC 20037-3213

EXAMINER

YABUT, DANIEL D

ART UNIT

PAPER NUMBER

3656

NOTIFICATION DATE

DELIVERY MODE

01/11/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

SUGHRUE265550@SUGHRUE.COM
USPTO@SUGHRUE.COM
PPROCESSING@SUGHRUE.COM

Office Action Summary	Application No. 10/590,008	Applicant(s) KADOKAWA ET AL.	
	Examiner DANIEL YABUT	Art Unit 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6 recites an “occupation ratio” being set to “90% or more to less than 100%” (as recited in claim 1), “80% or more to less than 100%” (as recited in claim 2), “50% or more to less than 100%” (as recited in claim 3), “80% or more” (as recited in claims 4 and 6), “50% or more” (as recited in claims 5 and 6). However, it is unclear as to how this ratio is calculated as the claim does not define the parameters of this ratio.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-30**, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Sada, US Patent 5,997,988.

Sada discloses rolling sliding parts of a surface which contacts another member comprising a(n):

Re claim 1

- Occupation ratio being set from 90% or more to elss than 100% (C3 / L46-48)
- Occupation ratio is the ratio of the sectional area of a planar portion of the surface at a depth of 2.0 micrometers from the outermost surface position (C3 / L42-43) to the area of the surface that contacts the other member
- Outermost surface position is defined as a highest portion out of fine roughnesses existing on the surface (C3 / L37-40)

Re claim 2

- Occupation ratio is set from 80% or more to elss than 100% (C3-46-48)

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- Occupation ratio is the ratio of the sectional area of a planar portion of the surface at a depth of 1.5 micrometers from the outermost surface position (C3 / L42-43), to an area of an overall surface of a portion that contacts the other member
- Outermost surface position is defined as a position of a highest portion out of fine roughnesses existing on the surface (C3 / L37-40)

Re claim 3

- Occupation ratio is set from 50% or more to less than 100% (C3 / L46-48)
- Occupation ratio is the ratio of the sectional area of a planar portion of the surface depth of 1.0 micrometer from the outermost surface position (C3 / L42-43), to an area of an overall surface of a portion that contacts the other member
- Outermost surface position is defined as a position of a highest portion out of fine roughnesses existing on the surface (C3 / L37-40)

Re claim 4

- Occupation ratio of a sectional area of a virtual plane in a plane direction at a portion that is positioned at a depth of 1.5 micrometers from the outermost surface position (C3 / L42-43), to the area of the surface that contacts the other member is set to 80 % or more (C3 / L46-48).

Re claim 5

- Occupation ratio of a sectional area of a virtual plane in a plane direction at a portion that is positioned at a depth of 1.0 micrometers from the outermost surface position (C3 / L42-43), to the area of the surface that contacts the other member is set to 50 % or more (C3 / L46-48).

Re claim 6

- An occupation ratio of a sectional area of a virtual plane in a plane direction at a portion that is positioned at a depth of 1.5 micrometers from the outermost surface position (C3 / L42-43), to the area of the surface that contacts the other member is set to 80 % or more (C3 / L46-48), and also an occupation ratio of a sectional area of a virtual plane in a plane direction at a portion that is positioned at a depth of 1.0 micrometers from the outermost surface position (C3 / L42-43), to the area of the surface of a portion that contacts the other member is set to 50% or more (C3 / L46-48).

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Re claims 7-12

- The rolling sliding part is a roller constituting a cam follower unit (Fig. 3) in which an outer peripheral surface of a roller (11a) supported rotatably around a roller supporting shaft (12) is brought into contact with an outer peripheral surface of a cam (at 7) via a rolling contact.

Re claim 13-18

- The rolling sliding part is a rocker arm (at 3; C5 / L28-39) into a part of which a cam follower unit is incorporated.

Re claims 19-24

- The rolling sliding part is an inner ring (near 13; C5 / L21-24; Fig. 2) having a cylindrical inner ring raceway on an outer peripheral surface or a shaft (12).

Re claim 25-30

- The rolling sliding part is a needle (13; C5 / L21-24) that is provided rollably between a cylindrical inner ring raceway and a cylindrical outer ring raceway (Fig. 2)

Response to Arguments

Applicant's arguments filed 9/18/2009 have been fully considered but they are not persuasive.

In response to applicant's argument that the ranges of the occupation ratios with respect to claims 1-3 are disclosed to be 5 to 20%, column 3, lines 45-48 recites "the ratio of the *open area* of the very small recess to the whole area of the rolling contact surface 11a, that is, the area ratio is set to 5 to 20% and more particularly, 5 to 10%" (emphasis added). The term "open area" reflects the area that is *not* in contact with the other surface. Support for this can also be found in column 6, lines 7-10 which recites, "An image obtained by microscopic observation was analyzed, to measure the ratio of the area occupied by *openings* of the very small recess to the area of the rolling contact surface. The results in the respective embodiments were all in the range of 5 to 20%" (emphasis added). Conversely, the broadest reasonable interpretation of an "occupation ratio" is the ratio of the area that is *in contact* with the other surface to the whole area of the rolling contact surface. Therefore, this value corresponds to the *inverse* of the range disclosed in the Sada reference resulting in an "occupation ratio" of 80 to 95%, or more particularly, **90 to 95%**.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL YABUT whose telephone number is (571)270-5526. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard W. Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL YABUT/
Examiner, Art Unit 3656
1/2/2010

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3656

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